

ABSTRACT OF THE DISCLOSURE

An apparatus and method for recovering and recycling a coolant gas from a heat exchanger. The apparatus comprises a coolant gas recovery section, and analysis section, and a coolant gas blending section. The coolant gas recovery section recovers a coolant gas containing contaminants from the heat exchanger. The analysis section monitors a condition of an analysis
5 portion of the recovered coolant gas. The coolant gas blending section operates to produce, based on the condition of the recovered coolant gas monitored by the analysis section, a blend coolant gas comprising a virgin coolant gas and a reclaimed coolant gas that comprises at least a portion of the recovered coolant gas. The blend coolant gas has a predetermined contaminant concentration and is recycled into the heat exchanger. Thus, the coolant gas is recovered from,
10 and recycled to, the heat exchanger at the predetermined contaminant concentration without using a purification device.